
REMARKS

Applicants have carefully reviewed and considered the Final Rejection as stated in the Office Action mailed on January 14, 2004 and the references cited therewith. Claims 1, 10, 12 and 13 are presently amended.

INTERVIEW SUMMARY

Applicants wish to express their gratitude to the Examiner for consenting to the telephone interview conducted on February 10, 2004. The summary of the telephone conference is accurately set forth in the Interview Summary Record prepared and mailed to Applicants on February 11, 2004.

Upon further consideration, applicants agree with the examiner that the Final Rejection mailed January 14, 2004 is not premature based on the modification to the claims set forth in Applicants' Amendment filed on 20 October 2003. Notwithstanding, for the reasons discussed below, it is respectfully asserted that the present Amendment after Final Rejection should be entered as placing the application in condition for Allowance while raising no new issues.

The actual changes to the claims as submitted in the present response are understood to differ somewhat from the changes proposed and discussed in the telephone interview. After careful consideration of the art cited in Final Rejection, it became clear that a fundamental difference existed between the Pogorski assembly and applicants' invention. However, it is believed that the terminology, i.e., "spacer layer" previously appearing in independent claim 1 may have been somewhat confusing. As will become clear below, the present invention basically comprises a reflection layer, a carrier layer and a fill layer of powder disposed between the reflective and carrier layers. Because this assembly appears in the original claims, it is believed that the present response does not raise any new issue after Final Rejection.

CLAIM REJECTIONS 35 USC § 103

In Paragraph 6 of the outstanding Office Action, claims 1-4, 8, 10, 11 and 36 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Pogorski et al. (U.S. Patent No. 6,221,456, referred to hereinafter as "Pogorski") in view of Barito et al. (U.S. Patent No. 4,636,415, referred to hereinafter as "Barito"). Pogorski is cited as teaching a thermal insulation panel including a number of envelopes enclosed within one another i.e., a inner gas-permeable envelope 3 enclosed within an intermediate impermeable envelope 7 that is, itself, enclosed within an outer gas impermeable envelope 2. Furthermore, a plurality of coarse granules 4 and fine particles 5 are "...shown as occupying a substantial part of the volume enclosed by inner envelope 3, and are in contact with each other. See Pogorski col. 5, lines 47-49.

Upon review, it is believed that by employing multiple, enclosed envelopes surrounding the granules and fine particles, Pogorski is able to create a semi-rigid, partially-evacuated panel insulation assembly that exhibits significant load-bearing capability. See claim 1. Pogorski specifically teaches that the panels "...can be bent by the application of external forces and retain the newly acquired shape when the external bending force is removed." See col. 8, lines 6-8. The fact that the panels retain their newly-acquired shape is evidence by load bearing capability of 2000 lbs/ft³. See col. 8, line 58.

As will become clear, applicants provide a fundamentally different structure that functions in a fundamentally different way from Pogorski. Whereas Pogorski's insulation must be bent to form various shapes and exhibits significant load-bearing capability, applicants disclose an insulation system that is flexible enough to conform to basically and three dimensional shape without the need for bending forces. This functional capability is inherent from the claimed structure wherein a fill layer of powder is disposed between a reflective layer of metal foil and a carrier layer formed of essential a paper like product.

Returning again to the Final Rejection, the examiner asserts that Pogorski's inner envelope 3 reads on Applicants' "carrier layer", while outer gas envelope 2 reads on applicants' reflection layer. It is further stated that Pogorski's coarse granules 4 and fine

particles 5 constitute a fill layer that combines with inner gas envelope layer 3 to form a spacer layer similar to applicants' claimed invention.

However, with reference to applicants' specification and drawings, the present invention is described as being made up of a reflection layer 110 and a spacer layer 140 that is, itself, formed from a combination of a carrier layer 130 and a fill layer 120. As shown in Fig. 1 and originally recited in claims 1 and 12, the fill layer 120 is located physically between the reflection layer 110 and the carrier layer 130. It is believed that some confusion may have arisen with the descriptive term "spacer layer" as originally appearing in claim 1. In comparison, claim 12 dispenses with the term "spacer layer" and defines an assembly comprising a reflective layer, a carrier layer and a separate fill layer formed of powder located between the reflective and carrier layers. This arrangement is neither shown nor suggested in Pogorski. Rather, Pogorski clearly teaches that the granules are enclosed within the inner envelope 3 and not between inner and outer envelopes 2 and 3. The only structure shown between Pogorski's inner and outer envelopes 2 and 3 is the optional intermediate envelope 7. There is simply no suggestion, express or implied in Pogorski of positioning a fill powder between the reflective and carrier layers. For this reason, claims 1 and 12 as presently amended, along with their dependent claims are believed to patentably distinguish over Pogorski.

The secondary reference Barito has only been applied as teaching the use of powdered silica in the core of an insulating material. While it may or may not be obvious to substitute Barito's silica powder for the granules in Pogorski, there is simply no suggestion in either Pogorski or Barito of arranging a powder fill layer between separate reflective and carrier layers as recited in claims 1 and 12.

It is believed that the current amendment clearly places the claims remaining under consideration in allowable condition. Because the unique location of the fill layer between the reflective and carrier layers was originally present in the claims, the current modifications to the claims only serve to clarify this relationship, and not to raise any new issues after Final Rejection.

It is therefore requested that the rejection of the claims 1-4, 8, 10, 11 and 36 under 35 U.S.C. 103 (a) as being unpatentable over Pogorski in view of Barito be withdrawn.

Claims 12-16 and 37 stand rejected under 35 U.S.C. 103 (a) as being unpatentable

over Pogorski in view of Barito and further in view of Karpinski (U.S. Patent No. 4,304,824 hereinafter referred to as "Karpinski"). Karpinski has been cited as teaching the use of edge strips to isolate groups of pellets.

Upon review, it is clear that there would be no need to employ the edge strips of Karpinski with Pogorski's multiple envelopes because the envelopes themselves would serve to prevent the granules from escaping from the panel structure. More importantly, there is no suggestion in Karpinski of employing a fill powder layer between reflective and carrier layers as presently claimed. For these reasons, it is requested that the rejection of claims 12-16 and 37 under 35 U.S.C. 103 (a) be withdrawn.

CONCLUSION

Claims 1, 10, 12 and 13 are currently amended in this Response After Final Rejection. In view of the above remarks, Applicants respectfully submit that the remaining claims 1-4, 8, 10-16, 36 and 37 do not raise any new issues After Final Rejection and that this Response after Final Rejection therefore should be entered the sole purpose of placing the application in condition for allowance. Applicants further request that a Notice of Allowability be issued for all of the remaining claims under consideration.

The Examiner is invited to contact Applicant's undersigned representative at direct dial (321) 867-7214 if there are any questions regarding this Response or if prosecution of this application may be assisted thereby.

Any additional charges necessary to prosecute this application are authorized to be drawn against Deposit Account 14-0116.

Date: _____

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Respectfully submitted,

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